

ECONOMIC COMMENTARY

Alberta's Building Products Sector is on the Road to Recovery

October 23, 2017

Highlights:

The building products sector was also impacted by Alberta's 2015 - 2016 recession, although not as severely as most other manufacturing sectors were. The reason for this is that U.S. housing starts are recovering strongly, which in turn is boosting Alberta exports of lumber and oriented strand board. Building product revenues are bouncing back this year and are expected to continue to grow as strong growth is forecast for U.S. housing starts.

Alberta's Building Products (BP) sector¹ was one of Alberta's fastest growing sectors until 2007. Sector revenues more than tripled between 1993 and 2007 to reach a high of \$8.8 billion that year. However, revenues fell by 26% between 2007 and 2009 driven by sharp losses for lumber, oriented strand board (OSB) and cement as the BP sector was hard-hit by the global economic crisis and the downturn of the US housing market. Sales rebounded strongly between 2009 and 2014 and reached a record \$9.5 billion in 2014.

Revenues declined during the recent recession to reach \$8.7 billion in 2016, primarily because of steep declines in the non-metallic mineral products (mainly cement) and architectural and structural metals sub-sectors which are dependent on Alberta's construction and oil

and gas sectors. However, the 10% decline in BP revenues between 2014 and 2016 is far less than the 21% decline in manufacturing sales. After bottoming out in early 2016 the value of BP shipments has grown strongly since then (Chart 1²).

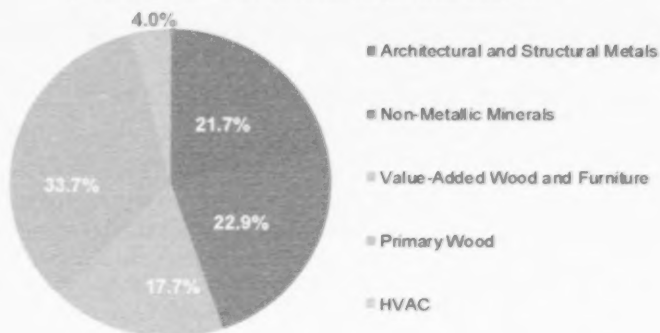
The sector's largest sub-sectors on a revenue basis are (Chart 2):

- Primary wood products (such as lumber and OSB): \$2.9 billion in 2016; sales increased 28% between 2006 and 2016 (peaked in 2004 at \$3.0 billion);
- Non-metallic mineral products: \$2.0 billion in 2016; 4% decrease between 2006 and 2016 (cement constitutes over 70% of sub-sector revenues);

Chart 1
Average Monthly Sales in the Building Products Industry
\$ Thousands (12-month moving averages)



Chart 2
Revenue Shares in 2016 for Major Sub-Sectors



¹ The building products sector includes NAICS industries 321 (wood products), 327 (non-metallic mineral products), 3323 (architectural and structural metals), 3334 (heating, ventilation and air-conditioning equipment) and 337 (furniture and related products)

² A 12-month moving average was selected for this chart as revenues for this sector drop off sharply during the winter months

- Architectural and structural metals: \$1.9 billion in 2016; sales fell 2% between 2006 and 2016 because of a 22% decline in 2016;
- Value-added wood products and furniture: \$1.5 billion in 2016; 18% decrease between 2006 and 2016; sales peaked at \$2.1 billion in 2007; and
- Heating, ventilation, and air-conditioning equipment (HVAC): \$347 million in 2016; 6% decrease between 2006 and 2016.

Between 2006 and 2016, Gross Domestic Product (GDP) of the BP sector fell 3%, compared with a 13% decline for Alberta's manufacturing sector over the same period. GDP for the sector grew strongly until 2007, declined sharply in 2009, and had recovered these losses by 2014. GDP fell by 12% during the recession of 2015/2016 because of sharp declines in the architectural and structural metals and cement and concrete products sub-sectors.

As of December 2016, the BP sector included 1,192 business establishments with employees, of which only 15% have more than 50 employees. About 85% of the businesses are categorized as being small (fewer than 50 employees). The sub-sectors with the largest numbers of establishments are: value-added wood and furniture with 458 establishments; and architectural and structural metals with 278 establishments.

GDP at basic prices (or by industry) measures an industry's unduplicated contribution to the overall economy by deducting the value of intermediate inputs that come from other industries from the value of its output (basically revenues or shipments). GDP is presented here in chained 2007 dollars. Percentage changes for GDP by industry are calculated using volume measures, that is, adjusted for price variations.

Between 2006 and 2016, the number of payroll employees in the sector declined by close to 4,000 workers to 30,450³. Employment in the BP sector peaked at 34,400 in 2006. The BP sector's workforce declined by more than 6,000 over the next four years because of the US housing crisis and the global recession to reach 28,300 workers in 2010, with most of the losses occurring in the primary and value-added wood products sub-sectors. After rising strongly between 2010 and 2014, employment levels fell by about 2,800 during Alberta's 2015/2016 recession. Employment has remained weak during the first seven months of 2017 (Chart 3).

Chart 3
Number of Payroll Employees in the Building Products Sector
\$ Thousands (12-month moving averages)



Source: Statistics Canada

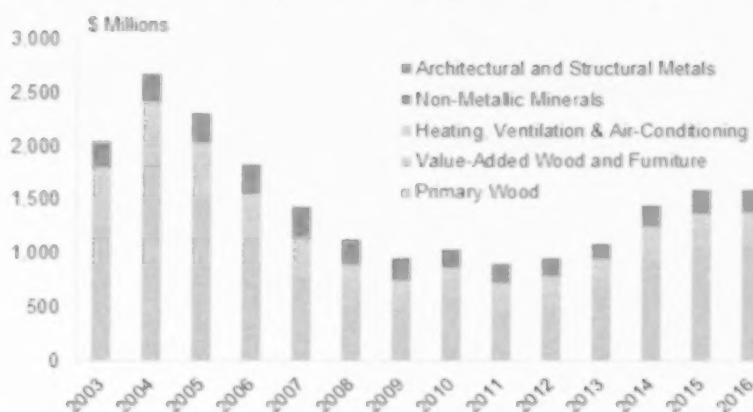
³ Source: Statistics Canada's Survey of Employment, Payrolls and Hours (Cansim table 281-0023)

About 65% of the sector's output is shipped to customers within the province, mainly in the construction sector, and 25% is shipped to customers in other provinces. Prior to the US housing crisis that started in 2006, at least 25% of this sector's production was exported internationally. However, this share fell steadily since then to about 11% by 2013 as the number of US housing starts declined from just over two million in 2005 to a post-World War II low of 550,000 in 2009 (and 610,000 in 2011). As the US housing market is improving so are exports of building products, especially primary wood products, and it is estimated that the international export share has increased since 2013 to reach at least 18% by 2016.

International exports of the BP sector reached a record high of \$2.6 billion in 2004 (Chart 4) as a result of very strong growth in exports of primary wood products. The BP sector's exports fell by about two-thirds between 2004 and 2011 to \$905 million. During that same time period, exports to the US, which account for more than 85% of Alberta's BP exports, fell by about the same amount of \$1.7 billion. International exports of primary wood products, such as lumber and OSB, fell by 75% because of a similar decline in US housing starts over the same period. Between 2011 and 2016, exports rose 72% to \$1.6 billion on a 72% increase in exports of lumber and a 500% increase in OSB exports

because of a near doubling in US housing starts. The BP sector's largest export market is the US, with a 94% export share in 2016, followed by Japan at 3%. In the first seven months of 2017, BP exports were about 40% higher than they were in the same period of 2016 as exports of lumber and OSB to the US continued to rise.

Chart 4
Value of Exports in Building Products Industry



Sources: Statistics Canada and Alberta Economic Development and Trade

The BP sector should fare relatively better than many other Alberta sectors over the short term as a result of the strong US economy and especially the boom in housing starts that is expected to continue in 2017 and 2018: in its latest US outlook Moody's Analytics is forecasting 1.6 million starts in 2017 and 1.8 million in 2018, up from 1.2 million starts in 2016. The low Canadian dollar will also be beneficial for the BP sector as it reduces the prices of Alberta products in foreign markets, especially in the US. The weakening of crude oil prices did lead to a weaker domestic market for building products in 2015 and especially in 2016. If oil prices remain low the Alberta economy may weaken again and this may also impact employment and in-migration and therefore also Alberta's housing market as it did in 2015/2016. The on-going softwood lumber dispute with the US provides another downside risk to the sector's outlook.